PROJECT NUMBER: 2304, 2305, 4015
PROJECT TITLE: New Product Development
PROJECT LEADER: B. G. Taylor, H. Maxwell, and W. G. Houck
PERIOD COVERED: July, 1987

I. MARLBORO/MARLBORO LIGHTS MENTHOL

A. Objective: (1) Develop Marlboro Menthol to appeal more to Salem smokers. (2) Develop a Marlboro Lights Menthol brand extension to appeal to Salem Lights smokers.

B. Status: St. Louis Test Market Start-up, August 3, 1987. 85 and 100 mm products in place. 85 mm Marlboro Lights vs. Salem Lights POL released. National introduction to possibly include 80 mm (FF) and 83 mm (LTS) box packings.

C. Plans:

St. Louis Test Market	8/3/87
Complete POL's 2139/40	9/87
Develop specifications for box product	8/87
Monitor Test Markets	On-going

II. PM BLUES

A. Objective: To develop both full (16 mg) and light (12 mg) versions of distinctively flavored menthol candidates to appeal to 18-25 year old smokers.

B. Status: Atlanta Test Market cancelled. Blues LTS POL making in progress. Blue II (version I) scheduled for non menthol mapping mail-out panel.

C. Plans:

Complete LTS 85/100 POL Testing	9/87
Blue II Mapping	10/87
Monitor Cleveland Test Market	On-going

III. FRESH

A. Objective: To develop 12 mg free-standing menthol candidates with special packaging for "freshness" perception. Target market: Salem Lights smokers.

B. Status: Ad/Pack shipment to HTI 6/26/87. POL making for 100 mm model vs. Salem LTS SP and Salem LTS FTB (8 sided test market box) in progress.

C. **Plans**:

Complete POL Testing	10/87
Test Market	1988

IV. MARLBORO ULTRA LIGHTS

A. **Objective**: To develop 85/100 mm low (8 mg) and Ultra Low (6 mg) candidates for Marlboro line extensions.

B. **Status**: POL Testing of 85/100 -- 6/8 mg prototypes complete. Both blend configurations appear to be within the range of acceptable candidates.

C. **Plans**:

Design Optimization (100 mm)	8/87
Additional POL Testing (If warranted)	10/87
Ad/Pack Testing	To be scheduled
Test market	1st Qtr., 88

V. PROJECT EXTRA

A. **Objective**: The development of 4-8 mg product candidates that have the subject taste of product with twice the tar.

B. **Status**: Mapping studies in progress. Paper/ca candidates under internal evaluation for selection of POL candidate(s). Flavor development with CR chemicals continue.

C. **Plans**:

Sensory mapping	On-going
Paper/ca POLs	10/87
Flavor development/screening	On-going

VI. PROJECT TRIM (Ultra Slim)

A. **Objective**: To develop 17 mm circumference/100 mm Ultra Slim product candidates.

B. **Status**: Mall testing of TRIM vs. Capri, B&H Lights, and Va. Slims --- all in regular and menthol --- in progress. Blend evaluation for $Mg(OH)_2$ candidates in progress. Initial adhesive runability trials completed 7/30. Blend samples for FTR scheduled for the weeks of 8/3 and 8/10/87. Set-up filters for FTR to be mailed

week of 8/3/87. B&H, Va. Slims, and Merit familes under consideration for this product.

C. **Plans**:

Complete Mall Testing	8/87
Samples to FTR	8/87
Design Optimization	On-going
Preliminary Specification ($Mg(OH)_2$ and regular)	8/87
Test Market Start-up	10/87

VII. PROJECT ART

A. **Objective**: To investigate methods to decrease the nicotine content in tobacco. To develop full-flavored, ultra low, and light products using the low nicotine tobacco products.

B. **Status**: Flavor development continues on the 6, 11, and 16 mg tar models (menthol and non-menthol) to increase the acceptability of the extracted samples.

Components that were identified as having been removed, are presently being evaluated on the 6 mg AB-Art model. Four components thus far are showing some promise - damascone, geranyl acetone, guaiacol, and 2-acetyl pyridine.

RL-TC and RL-150B produced with the stems used in Bremen 4 runs have been subjectively evaluated. The RL-TC was more acceptable than the RL-150B in handmade samples. Subjective evaluations were also done on models where direct inclusion of the stems in the blend was done. The "as is" stem inclusion model was significantly better than the "post washed" stems inclusion model. Samples were also made utilizing the DIET expansion process for the stems. Subjectively, this model was not as good as the "as is" or "post-washed" direct inclusion models.

From evaluations of tower extracted washed burley stems, a blend (using Bright and Burley tobaccos only) was developed by the Leaf Department and submitted to the tower for extraction.

The Extended Smoking testing of Brem-4 and Doral has been completed. The ART model was significantly lower in acceptability

than the Doral initially and at the end of five packs. The ART model's ratings dropped from the first to the last cigarette of the first pack where the Doral's ratings increased. The Doral ratings dropped from the first cigarette of the last pack to the last cigarette of the last pack where the ART model did not. Testing is being scheduled for the extended smoking of Carlton and Brem-4 model.

Sidestream visibility results for samples constructed at slim (23.0 mm) and ultra slim (17.0 mm) circumferences indicated a reduction of seventy-four percent for model X6D7BGH and seventy percent for model X6D7BGI. Both models were produced using $Mg(OH)_2$ cigarette wrapper (P4LP).

C. **Plans**:

Continue flavor work on the 3, 6, 11 and 16 mg models	
Begin development of menthol ART models	3rd quarter
Complete OV study	July, 1987
Continue coordination of cigarette model production	On-going
Review program	3rd quarter, 1987
Pilot Plant start-up	Oct., 1987